

Castlemaine Naturalist

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Monthly newsletter of the
Castlemaine Field Naturalists Club Inc.



Wanderer *Danaus flexippus* at Anglesea
photo - Noel Young

SEANA Autumn Camp at Anglesea

Five members of CFNC attended the SEANA Camp this time, and the whole weekend was enjoyable and informative. The variety of excursions made for difficult choices, and resulted in us experiencing different aspects of this always interesting area. Two different reports are presented here

Geraldine Harris

On Friday evening after dinner Chris Morrissey (President) gave a brief history of ANGAIR's 40 years of history. This was followed by an enthusiastic and lively presentation on local flora and fauna by Margaret McDonald.

During the weekend there was a choice of two full-day excursions -

- 1 Aireys Inlet Settlement Ponds and two Ridges
- 2 Ocean Grove to Brimlea in search of Birds

and a variety of half-day excursions -

- 3 Painkalac Estuary and the Eagle Rock Marine Sanctuary
- 4 Point Addis Marine National Park Rockpool Ramble
- 5 Aireys Inlet Cliff Walk
- 6 Anglesea Cliff-top Walk
- 7 Anglesea River Walk
- 8 Orchids & Other Plant Species including Trees of the District.
- 9 Ixodia Track
- 10 Geology - Aireys Inlet Coast
- 11 Fire can both destroy and save a heathland
- 12 Excursion to Torquay Primary School Environmental Centre
- 13 Urquhart Bluff to Split Point Lighthouse
- 14 Beach- nesting Bird Walk from Anglesea River to Point Roadknight.

After dinner Guest Speakers included –

Meg Cullen, Birds Australia – Beach-nesting Birds

Mark Rodrigue, Marine and Coasts, Parks Vic - Wet and Wild – Exploring the marine Environments of Victoria's West Coast

Craig Morley, Bellarine Peninsula Orange-bellied Parrot Working Group – The Orange-bellied Parrot: Some aspects of the Ecology and Identification of a critically endangered species.

David Pace, Award-winning Environmental Science Teacher and Frog Enthusiast – Frogs of the Surf Coast.

On the Painkalac Estuary and Eagle Rock Marine Sanctuary excursion we learned that Painkalac is an Aboriginal word meaning 'good place to camp' and historically this area has been a much disputed territory probably because of its rich source of foods. Warned not to lose sight of our fingertips as we searched in the rock-pools, in case we should meet a dangerous Blue-ringed Octopus, we began to explore. During the morning, among the rocks in this William Buckley cave territory, we found vegetarian Elephant Snails and carnivorous Dog Whelks eating other shells by sawing a hole in their shells and sucking them out. False Limpets, Variegated Limpets, little dark dollops of Blue-green Algae, and plants such as Mermaid's Fans, Neptune's Necklace, Bull Kelp, Red Waratah anemones, various Ischnochitons, Shore and Red Crabs and a bright Red Sea Star.

Our next outing was to various sites along the Great Ocean Road to look at **the affects of fire on heathland**. In the Mary White Reserve we looked at metre-high heath and learned that this coastal heathland is one of the most ecological diverse areas in the world. This area had been weeded by hand over the years since the 1983 fires and is in very good condition.

On disturbed ground nearby we looked at the problem of Coastal Tea-tree and Coastal Wattle. Both of these plants are considered environmental weeds in the Anglesea Heathland and should not occur beyond 100 metres from the beach or east of Torquay. Both species colonise burnt areas after fire. Dense populations of these plants result in decreased diversity of understorey and also are seen as a fire fuel hazard. One solution to this environmental weed problem is 'fuel reduction' burns but opinions vary on how to manage the areas after they are burnt.

We visited a recently burnt site and discussed the difficulty of weeding on such a site blackened by fires and with many hazardous exposed twigs and branches. We discussed the need to understand the best times to burn so as to reduce weed seed bank but not to destroy other plants.

Much time has been spent creating exclusion plots to study various types of exclusion fencing and management procedures after fire. The use of bulldozers to knock down and leave vegetation to dry prior to experimental burns in an attempt to create low fast burns has proved successful.

We looked at a site where the initial post burn weeding concentrated on Bone-seed and this had resulted in the Coastal Wattle being allowed to completely dominate the area. Some of the methods of post fire management included various types of

spray, mulching/slashing with a groomer, and hand weeding alone. Sprays have only been marginally effective. Mulching/slashing has been moderately successful. The best results so far have been from hand weeding which is very labour intensive.

Sunday and Monday were spent out at various well chosen sites around Anglesea studying the plants of the area.... but that will have to wait for another time.

Noel Young

Inspired by Meghan Cullen's talk on the plight of the beach nesting Hooded Plover the previous evening, I joined her group on a balmy Sunday morning to stroll the beach looking for these and other shore birds. We were immediately confronted by an example of the problems the Plovers are faced with – an “iron man” contest was in full swing, and a long line of runners along the strand took some time to pass. Most seemed oblivious of their surroundings, some with earphones and players to drown out the sound of the birds and the waves. Our planned walk had been somewhat shortened, in the hope of getting to Point Roadknight (where Meghan knew there were Hooded Plovers) before the throngs. It was not to be, but we found six Hooded Plovers there, seemingly oblivious of the beach runners, so all was not lost. Our walk was timed for low tide, so the Plovers were busily picking over the exposed rock shelf before the tide came in again.

Late March is the end of the nesting season, and adult Plovers are quite tolerant of human activity. Having adapted to the human invasion of their once wild environment, they are aware, for instance, that dogs on a leash are not a threat, but are nervous of free – romping canines. Some adults live for 30 years or more, and appear to survive fairly well. The big problem is getting from egg to adult, which only takes a few weeks, but during this time there is a high mortality.

Attempts are being made to manage the nesting process by fencing off known nest spots, educating the public, restricting unrestrained dogs, providing little 'A' frame shelters for the chicks to hide in, monitoring with cameras and so on. There are only about 400 birds on the Victorian coastline, though I have heard they are doing well in Tasmania, where there are still plenty of wild and remote beaches left.



An Expedition to the Mountains of the Moon

By Eve Gray

Eve Gray is a long standing member of the CFNC. As a young nurse she left the UK to begin nursing in East Africa, and whilst there she joined the Mountain Club of Kenya. What follows is an account she wrote of an expedition in which she participated.

After leaving Africa Eve took up a post at the Mt Alexander Hospital where she became Deputy Director of Nursing, a post she held till she retired. Following an injury at home, Eve now resides at Ellery house, but would still enjoy visits from old friends and acquaintances.

The Ruwenzori were (re) discovered in 1876 by H.M. Stanley. They had been described by Ptolemy who called them "The Mountains of the Moon". The ancients mistakenly believed them to be the source of the Nile. They lie on the Uganda-Congo border in an arm of the Great Rift Valley. Permanent snow and glaciers cover the mountains above 4,600 m.

Through the slit window of the grass hut at Bugoye Base Camp we saw the first grey light of dawn. From outside could be heard the murmur of native voices. There was a rustling and a movement of people, fowls and animals. Then came the sound of birds, more and yet more birds, louder and louder their chorus rent the air. Like some fine Eisteddfod choir they rendered their magnificent dawn chorus.

Outside in the East the sun loomed slowly up over the flat plains. As it rose the rich coloured hues of dawn melted away into the blue of a late tropical December sky

The long awaited day was here at last. Now after several weeks preparation we were ready to set out on our journey to the Mountains of the Moon in the Ruwenzori Range. It was the last day of December and reputedly the best time of the year to go forth into this region where for almost nine months of the year the mountains are shrouded in mist, fog and ice, and where perpetual snows cover the highest peaks. It wasn't just the fact that these mountains are fabled, and have been spoken of by historians and great travellers: it was the sheer joy of a challenge, and the insatiable desire and curiosity to see this strange world and the beauty of its flora, the magnificence of its mountains.

Since our arrival in Uganda we had all heard and read so much of this equatorial region where there are so many snows and glaciers, of the great primeval forests and the thick forests of bamboo where the elephant and the leopard roam. We had heard of the giant Groundsel trees, the tall blue Hibiscus, the alpine flowers, and the dark crater lakes which lie in the valleys between the mountains.

We had carefully estimated our requirements of food, clothing, and medical supplies. Once away from human habitation, we would need to be self-sufficient and self-supporting. We hired a Bakongo tribesman as our guide. He had done the journey many times. He spoke of illustrious climbers and expeditions, and no doubt to his experienced eye he realised we were but inexperienced and tender-

footed.. But he knew the way through the forest and across the treacherous boggy heathland, and on into the high valleys and up to the glacier edge, and we in turn felt confident.

Nine Bakongo porters had been engaged to assist us with our packs of food, blankets and supplies. These hardy thick-set folk who inhabit the Mabuku Valley on the eastern flank of the Ruwenzoris are, generally speaking, willing and cheerful and as tough as any sherpas, well accustomed to carrying loads through the most difficult conditions of rain, snow and mud.

After some initial haggling over packs, a series of customary farewells to friends and relations, Mahindi our guide succeeded in dispatching the porters on their journey. We then gathered up our packs, our cameras and water bottles and sallied forth. In the far distance along the valley we could see the Pontal Ranges, their snow capped peaks glistening in the sun. Ahead of us lay some 15,000 feet of rough walking, scrambling and climbing.

Within a short time we crossed a shallow stream and cut off into the elephant grass which stretches as far as the forested foothills. We passed by native dwellings where half naked children played. Chickens, goats and other domestic animals wandered aimlessly between the dwellings. The womenfolk were cultivating or busy about their dwellings.

Presently we entered the lower reaches of the forest, still amidst the tall elephant grass. The undergrowth was dense and thick, it was hot and humid. We walked like this for two hours or more, and we steadily climbed. As we gained height, the trees and undergrowth became sparser, there was less shade. Small outcrops of rock appeared. This rough bush-like country made walking more difficult. We were gradually getting higher and down when we looked, we could see the plains, hot and hazy. It became hard to resist the temptation to sip our precious water, and when we did, it barely staved our thirst and heat away. We were all overcome with lassitude and nausea. And when we considered and estimated our height at around 7,000 feet, we realised that we were in fact experiencing the first symptoms of mountain sickness. The thought of the cool we'd have when we reached the bamboo belt spurred us on, and when at last we sighted the beginning of the leafy forest, we found a comfortable place and ate a light lunch of bread, cheese, fruit, chocolate, raisins, and nuts.

Several broad tracks traversed the bamboo forest. As we pushed on deeper into the forest, everywhere was beautiful and cool. The great bamboos were as high as 50 feet and more, their great outstretched branches spread thickly, gave thick shade. Only small shafts of green light filtered through. Occasionally we heard the crash of branches and rustling of leaves. We saw the spoor of elephant and wild game, but not a beast did we see.

Then at last we reached the broad Bujuki River. It was late afternoon, waters from the melted glaciers had helped flood the torrent and with relief we scrambled across the thick old trunk of the forest tree that so obligingly spanned the river at this point. We had another good two hours steady climb before we reached our destination, so on we pushed. The forest began to have a chilly air about it, and

underfoot the paths were damp and at times slippery. This slowed us down considerably; two members were feeling very sick and weary. Sips of water didn't help allay the nausea, and at times they slyly resorted to liquid medical comfort – sips of brandy. The forest became thinner, although it was almost dark we could see shapes ahead and sky above. Then way ahead on the spur of a hill we saw the glister of the aluminium roof of the club hut.

With a great sense of relief we dragged ourselves on up the last 200 yards to the hut. Porters and guides already there, busily preparing a fire, we flopped exhausted, eagerly awaiting our first hot cup of tea. There on the hillside, after the evening meal had been taken, we watched the moon high in the sky and again we saw the snow glistening on the Pontal Peaks. Before settling down to sleep we eeked meagre rations of medical comfort brandy and bade farewell to the Old Year.

New Year's Day was fresh and clear. After breakfast we set off again. We had now left the bamboo belt of forest and would be climbing steadily through more open country. We had to cross two rivers before reaching the open heath. About 10 a.m. we recrossed the Bukuju River. It was broad and clear, large scattered boulders made it easy for us to cross without getting wet. We paused to study its beauty – tree-lined and bordered by giant Groundsel trees as high as 30 feet, their thick stems surmounted by vast globe artichoke type leaves, and crowned with spikes of yellow flowers up to four feet high. The forest trees were tall and straggly, their branches hanging with lichens. Shades of green and yellow lichen, it hung like thick cobwebs

Across the river the open heath was rough and swampy. Masses of tall tussocks of grass surrounded by channels of muddy water.. These tussocks stood out like islands. Using our wooden staffs as supports we leaped and jumped from tussock to tussock. Every now and again one of us would miscalculate the point of landing and end up by sinking to the shins in water and slime. We trekked on in this manner for three hours or more. (It seemed like an eternity). The sky clouded over, but as we tramped on, we caught more glimpses of the mountains and the snow. Each time we felt rewarded and exhilarated and on we pushed to the hut at Wyamaleju at over 10,000 feet.

After a meal of bully beef and rice, we settled down for the night. We rose before dawn and by the time the sun was rising, we were ready for the next leg of our journey. On we walked through more rough heath. There were masses of giant Groundsels, with their ugly olive green succulent looking leaves, and topped with spiky yellow flowers. We saw sunbirds darting around in search of insects and nectar. There were great heaths hanging with pale yellow lichen, their great trunks twisted and gnarled. Every outcrop of rock was carpeted with moss of a hundred different greens.

After mid-day the cloud came down, visibility dropped and at times we could only see ahead as far as 20 to 30 feet. The Groundsels stood out like sentinels, weird and silent, they gave the area an eeriness. Only the soft mumbling chatter of the porters served to give us assurance.

We continued in the mist and fog until we reached the bend turning into the Bujuku Valley. Here it was clearer, and we could see the great crater lake, dark and foreboding. Round it grew more Groundsels and giant spiky Hibiscus. To our left rose Mt Baker, its slopes covered with scree. To our right were the Johnstone and Speke Glaciers. Ahead to our left was Mt Stanley and at the far end of the valley was the hut where we'd spend our next few days. It nestled on the slopes of the Stuhlman Pass.

We were now three days walking away from civilisation and in a Fairy Land. Mostly the nausea and lassitude had left us, but we were still experiencing slight headaches. Also, our faces were slightly swollen and puffy about the eyes. Our ankles and feet were swollen, but we had kept our boots regularly cleaned and supple with grease. We suffered no other ills or discomforts.

The light was very bright and when the sun was up, we wore sun glasses and used special Ultra-Violet filters for our cameras. We had remained congenial towards each other and no serious disagreements had occurred. However, it was a relief to find fresh and interesting company already at the hut. They were knowledgeable about the area. In all there were now eleven of us, and we all spent the next three days camping at the Bujuku Hut, 14,300 feet up in the Ruwenzori Mountains.

During the three days we spent our time pottering around, talking, walking, taking photographs and making notes. We scrambled up as far as the Speke Glacier. We crossed the Stuhlman Pass and climbed a high ridge overlooking the valley. From there we gazed towards the Congo. Through our glasses we could see the sealed roads and what appeared to be a small Government Administrative Centre. Our walks were always taken in the forenoon or as early as possible in the afternoon. We always took Mahindu with us for he had an almost magical instinctive way of seeking out the safest tracks. In these mountain areas fog or thick mist descend quickly and with little warning.. Any inexperienced traveller could be completely lost and wander aimlessly for hours and possibly perish.

In the evenings we watched the sun set. We were all enraptured with the beauty of Mt Baker, 15,988 feet, and Mt Stanley 16,794 feet, the latter looked particularly beautiful, especially when the sun began to sink low. The sky held so many shades of rich colour and finally before the light disappeared, a pink glow enveloped the high snows of Mt Margherita. (16,798 feet) On our last night we completed records in the Club Hut log book and made preparations for an early start the next day.

Next morning was fine and clear. We set out to cross the Freshfield Pass at 14,403 feet. We cut down the valley, then up through the Groundsel forest on the side of Mt Baker. The going was tough and we had to scramble across and balance on rotted slimy dead trunks. It was very tiring, but around these was the unique beauty, we were in a weird forest-like setting, but everywhere it seemed petrified and unreal.

The last two hundred yards scrambling up the scree was welcome and once up on top we felt exhilarated. We could walk easily and with purpose and the day was clear. To our right in the distance lay the Elena Coronation Savous Glaciers. We

walked within half a mile or so, and as we went we gathered everlasting alpine flowers.

After a light lunch, we pressed on down to the chain of lakes that stretch on into the Congo. We passed the first one, and about a mile on we came to Kitandara. The sun was shining and it was warm. The water of the crater lake seemed a vivid blue. It lies in a valley sheltered by Mt Baker and beyond are the beautiful Weismann peaks. The vegetation is lush - giant Groundsel, forest heaths and heavenly blue Hibiscus grow along its shores. Outside our hut there was the most magnificent specimen of St John's Wort, it must have been five feet or more, full of deep yellow - orange flowers.

We gazed at the beauty and tranquillity of the lake and its surroundings, All quiet, spellbound, we unanimously agreed that we'd cut the return trip down the mountain to two days and spend at least three around the lake of Kitandara.

Our decision was never regretted. We photographed, we walked and we collected botanical specimens and two members of the party sketched. The weather was supreme. We talked hopefully of other mountain ranges that we would eventually climb - but somehow we all felt that this place could never be excelled.

Throughout our journey we had been lucky. We had enjoyed good weather. RUWENZORI translated from the vernacular into English means "The place whence the rain comes". Fortunately for us we saw the beauty and magnificence of the ranges in perfect weather, a unique experience in the "Great Mountain in the Country of Gambatagara" or the great leaf in which the clouds are boiled.

Castlemaine Geology

Noel Young

At the March meeting Geologist Julian Hollis (now a resident of Castlemaine) gave us an excellent summary of the geology of the district, covering the broad setting and moving to more specific features in the local area, some of which were revealed the next day on our excursion around the town.

The type of rocks together with geological processes determine the shape of the land, the soil type, and of course, the concentration of mineral resources, the last being the reason for Castlemaine's existence. The basement rocks of the area were laid down as sediments in a broad shallow sea during the Ordovician, a time when world geography was unrecognizable, with 'Australia' still part of Pangea, an amalgam of all the current land masses of the world. Pelagic animals looking more like the fronds of some seaweed lived in these waters and evolved fairly rapidly, so that their fossils can now be used to subdivide ages within the Ordovician. Known as Graptolites, they mark zones of decreasing age from west to east with locally significant names - Yapeenian, Castlemainian, Chewtonian, Bendigonian and Lancefieldian.

Severe east - west compression forces some time later crushed these sediments into acute angled folds. The crest of such a fold, known as an anticline, is clearly

marked at Lyttleton st. east of Urquhart st., but it is typical of many that are revealed underground in the gold mines.

The granites in the area intruded around 360 million years ago as molten magma, solidifying deep below the surface. In the hydrothermal scenario, hot gases and volatile liquids driven ahead of the melt invaded crevices in the Ordovician and deposited minerals including gold. The rock close to the granite contact was baked into 'hornfels', a tough fine grained rock used for paving in older houses. A severe ice age in the Permian resulted in large glaciers peeling off a considerable thickness of the crust and exposing the granites. And a recent phase of basaltic volcanic activity in western Victoria has helped reshape the landscape.

These and many other facts Julian discussed in detail, drawing from his considerable knowledge of the subject. He is currently elaborating on all this for the U3A.



Above left: Julian Hollis points to evidence that the 30 million year old gravels in the embankment below Kennedy St. were deposited by a north flowing stream, ie the opposite to the current drainage system.



Above right: Julian points out quartz veins and other features in the sandstone dominated Ordovician of the Kalimna ridge



Left: An anticline in the Ordovician associated with the "Town Reef" in Campbell st. near Hargraves st. This saddle reef was the first reef gold to be exploited after the alluvial gold ran out

Notices

Welcome to new members - Prue Price, Richard Lee, Hilary Da Costa, Bronwyn Silver, Tim Young and Christine (and team) Henderson.

And a subscription reminder – our treasurer reports that there are still a significant number of outstanding fees for this year. If yours is one, please attend to this as soon as possible.

Autumn Orchids Geraldine Harris

During March I have found two orchids in our bush paddock. The first one I noticed was the Dark Midge Orchid *Corunastylis* sp. aff. *rufa*. These orchids are probably more common than thought but because they are so hard to see they are usually only seen when searching for them in a likely or known location. Their flowers are tiny and insect like in shape and colour with a cluster of tiny maroon and green flowers on a thin green stem with a small stem bract just below the flower. There are two other Midge Orchids found in the district: the Sharp Midge-orchid *Corunastylis despectans* and the Fringed Midge-orchid *Corunastylis ciliata*.

The other orchid was a Parson's Bands Orchid *Eriochilus cucullatus*. *Eriochilus* refers to the woolly lip and *cucullatus* describes the hood formed over the column by the dorsal sepal. The leaf of this orchid is ovate and pointed at one end but it is does not develop until after the flower is finished. The flowers are usually solitary and they have a pleasant perfume. The lateral sepals are large and are held out in front. They vary from white to pink and resemble the tails of the neckband once worn by clerics, hence the name Parsons Bands.

Another Orchid to look for at this time of the year is the Tiny Greenhood *Pterostylis parviflora*. It is also quite hard to see but easy to identify as its flowers face towards the stem. The red tipped form is *Pterostylis* sp affin *parviflora*.



Join a macro-invertebrate survey of Forest Creek

Do you like playing around with water and looking for critters? Are you interested in finding out more about the water quality in Forest Creek? If you answered yes to either of these questions, please come and join us as we do a macro-invertebrate survey of one of our waterholes. We'll be collecting some samples of water from the bottom of the creek, and examining them closely to find all the tiny creatures that inhabit our creek. If you've never done this before, you'll be amazed to see the variety of insect larvae, worms and other wrigglers that are in the water. As well as being fun, the survey has a serious side, as the types of creatures we find are a good indicator of water quality.

The session will be run by Cass Davis, the WaterWatch facilitator from the NCCMA. We'll meet at the large waterhole just upstream of the footbridge in Happy Valley. Meet at **10am on Tuesday 12th April**. We've chosen a date in the school holidays as this is a great activity for children as well as adults. Further directions and a map are on our website at <http://northcentral.landcarevic.net.au/castlemaine/activities/macro-invertebrate-survey-of-waterhole/> Or please contact me if you'd like any further information.

Anne Perkins, Castlemaine Landcare Group. Member of the WaterWatch team

Observations

- ◆ Natalie had found a frog had taken up residence in the bath over four nights
- ◆ Phee experienced a hailstorm of berries caused by 20 Cockatoos attacking the Rowan tree
- ◆ Large flocks of Cockatoos and Corellas have been giving Rita a hard time. She also noted a flock of Yellow tailed Black Cockatoos while on a walk in Elphinstone
- ◆ Denis passed around a fine specimen of a large brown stick insect.
- ◆ Julian Hollis regularly hears a Magpie singing a very distinct and melodious tune at first light
- ◆ Dianne Thompson told of a family of Magpies practising their song regularly under some plant boxes in her nursery – might be for the acoustic effect like singing in the shower?
- ◆ Penny reported that a friend had seen an Emu in the area
- ◆ Denis had also seen an Emu close to the highway to Harcourt near McManus road
- ◆ Richard pointed out that now is the time to look out for six species of Autumn flowering Greenhood Orchids and Parsons Bands
- ◆ First sighting of SWIFT PARROTS on 27th March – 30 birds in a large flowering Grey Box at Muckleford – Debbie Worland

<p>Disclaimer: The opinions expressed in this newsletter are those of the contributors and not necessarily those of the club</p>

Castlemaine Field Naturalists Programme

April 2011

Fri April 8 meeting: speaker: DEBBIE WORLAND Swift Parrots

Sat April 9 field trip: Captains Gully road

Fri May 13 meeting: speaker: RICHARD RETALLIC
on frog declines and recoveries

Sat May 14 field trip: Firth Park, Trentham

Sat May 21 (22) Swift Parrot / Regent Honeyeater survey

Fri June 10: meeting: speaker: NATASHA SCHEDVIN Barking Owls

VISITORS ARE WELCOME AT CLUB ACTIVITIES

General meetings - (second Friday of each month, except January) are held in the Uniting Church (UCA) Hall (enter from Lyttleton St.) at 8.00 pm.

Field Trips - (Saturday following the general meeting) leave from the car park opposite Castle Motel, Duke Street at 1.30pm sharp unless stated otherwise. BYO morning and/or afternoon tea. Outdoor excursions are likely to be cancelled in extreme weather conditions. There are NO excursions on total fire ban days.

Business meetings - fourth Thursday of each month, except December, at Denis Hurley's; 20 Merrifield St., at 7.30 pm. All members are invited to attend.

Subscriptions for 2011

Ordinary membership: Single \$27, Family \$35

Pensioner or student: Single \$24, Family \$29

Subscription includes postage of the monthly newsletter, Castlemaine Naturalist

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